AMENDMENTS TO THE CLAIMS:

Amend the claims as follows:

Claims 1-25. (Canceled)

26. (Previously Presented) A kit for the detection of anti-hepatitis C virus antibodies in a body fluid sample, comprising:

at least one epitope selected from the group consisting of:

(a) at least 5 to at most 20 amino acids located in the region consisting of amino acids 1688 to 1707 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(b) at least 5 to at most 20 amino acids located in the region consisting of amino acids 1694 to 1713 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(c) at least 5 to at most 20 amino acids located in the region consisting of amino acids 1706 to 1725 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(d) at least 5 to at most 20 amino acids located in the region consisting of amino acids 1712 to 1731 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(e) at least 5 to at most 12 amino acids located in the region consisting of amino acids 1718 to 1737 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(f) at least 5 to at most 20 amino acids located in the region consisting of amino acids 1724 to 1743 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(g) at least 5 to at most 12 amino acids located in the region consisting of amino acids 1730 to 1749 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(h) at least 5 to at most 20 amino acids located in the region consisting of amino acids 2287 to 2306 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(i) at least 5 to at most 20 amino acids located in the region consisting of amino acids 2299 to 2318 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(j) at least 5 to at most 20 amino acids located in the region consisting of amino acids 2311 to 2330 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(k) at least 5 to at most 20 amino acids located in the region consisting of amino acids 7 to 26 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(m) at least 5 to at most 20 amino acids located in the region consisting of amino acids 13 to 32 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV, and

(n) at least 5 to at most 20 amino acids located in the region consisting of amino acids 49 to 68 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV; and

a means for detecting an immunological complex formed between said epitope and said antibodies.

27. (Previously Presented) The kit of claim 26, comprising a collection of at least two epitopes selected from the group consisting of (a), (b), (c), (d), (e) and (g).

28. (Previously Presented) The kit of claim 27, comprising a collection of epitopes (a), (b), (c), (d), (e) and (g).

29. (Previously Presented) The kit of claim 26, comprising a collection of at least two epitopes selected from the group consisting of (a), (b), (c), (d), (e) and (g) and at least two epitopes selected from the group consisting of (k), (m) and (n).

30. (Previously Presented) The kit of claim 29, comprising a collection of epitopes selected from the group consisting of (a), (b), (c), (d), (e), (g), (k), (m) and (n).

31. (Previously Presented) The kit of claim 26, comprising a collection of at least two epitopes selected from the group consisting of (a), (b), (c), (d), (e) and (g) and at least two epitopes selected from the group consisting of (k), (m) and (n), and at least two epitopes selected from the group consisting of (h), (i) and (j).

32. (Previously Presented) The kit of claim 31, comprising a collection of epitopes selected from the group consisting of (a), (b), (c), (d), (e), (g), (k), (m), (n), (h), (i) and (j).

33. (Previously Presented) The kit of claim 26, comprising a collection of at least two epitopes selected from the group consisting of (b), (c) and (d), and an epitope (m), and at least two epitopes selected from the group consisting of (h), (i) and (j).

34. (Previously Presented) The kit of claim 33, comprising a collection of epitopes selected from the group consisting of (b), (c), (d), (m), (h), (i) and (j).

35. (Previously Presented) The kit according to any one of claims 26-34 wherein said epitopes are independently produced by recombinant expression or chemical synthesis.

36. (Previously Presented) The kit according to any one of claims 27-32 wherein said epitopes are produced by recombinant expression or chemical synthesis.

37. (Previously Presented) The kit according to any one of claims 33-34 wherein at least one of said epitopes are produced by chemical synthesis.

38. (Previously Presented) The kit of claim 26, comprising a collection of epitopes selected from the group consisting of (k), (m), (n), (b), and (i).

39. (Previously Presented) The kit of claim 26, comprising a collection of epitopes selected from the group consisting of (k), (n), (b), (d) and (i).

40. (Previously Presented) The kit of claim 26, comprising a collection of epitopes selected from the group consisting of (k), (m), (n), (a), (d) and (i).

41. (Previously Presented) The kit of claim 26, comprising a collection of epitopes selected from the group consisting of (k), (b) and (i).

42. (Previously Presented) The kit of claim 26, comprising a collection of epitopes selected from the group consisting of (k), (m) and (n).

43. (Previously Presented) The kit of claim 26, comprising a collection of epitopes selected from the group consisting of (a), (b), (d) and (i).

44. (Previously Presented) The kit of claim 26, comprising a collection of epitopes selected from the group consisting of (h), (i) and (j).

45. (Previously Presented) The kit of claim 26, wherein said epitope is selected from the group consisting of (b), (i) and (m).

46. (Previously Presented) The kit according to any one of claims 38-45 wherein said epitopes are independently produced by recombinant expression or chemical synthesis.

47. (Previously Presented) A device for detecting anti-hepatitis C virus antibodies, comprising:

(i) an isolated body fluid sample comprising said anti-hepatitis C virus antibodies,

(ii) at least one epitope selected from the group consisting of :

(a) at least 5 to at most 20 amino acids located in the region consisting of amino acids 1688 to 1707 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(b) at least 5 to at most 20 amino acids located in the region consisting of amino acids 1694 to 1713 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(c) at least 5 to at most 20 amino acids located in the region consisting of amino acids 1706 to 1725 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(d) at least 5 to at most 20 amino acids located in the region consisting of amino acids 1712 to 1731 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(e) at least 5 to at most 12 amino acids located in the region consisting of amino acids 1718 to 1737 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(f) at least 5 to at most 20 amino acids located in the region consisting of amino acids 1724 to 1743 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(g) at least 5 to at most 12 amino acids located in the region consisting of amino acids 1730 to 1749 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(h) at least 5 to at most 20 amino acids located in the region consisting of amino acids 2287 to 2306 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(i) at least 5 to at most 20 amino acids located in the region consisting of amino acids 2299 to 2318 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(j) at least 5 to at most 20 amino acids located in the region consisting of amino acids 2311 to 2330 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(k) at least 5 to at most 20 amino acids located in the region consisting of amino acids 7 to 26 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV,

(m) at least 5 to at most 20 amino acids located in the region consisting of amino acids 13 to 32 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV, and

(n) at least 5 to at most 20 amino acids located in the region consisting of amino acids 49 to 68 of the HCV polyprotein of an HCV isolate wherein said epitope is capable of providing for immunological competition with at least one strain of HCV;

wherein said at least one epitope is bound to an anti-hepatitis C virus antibody contained in said body sample in the form of an immunological complex.

48. (Previously Presented) An immunological complex comprising an epitope of any of claims 27 and 45 or a collection of epitopes of any of claims 28-34 and 38-44, and a an anti-hepatitis C virus antibody contained in an isolated body fluid sample.

49. (Previously Presented) A device for detecting anti-hepatitis C virus antibodies, comprising:

(i) an isolated body fluid sample comprising said anti-hepatitis C virus antibodies, and

(ii) at least one epitope collection of any of claims 28-34 and 38-44,

wherein at least one epitope of said at least one epitope collection is bound to an anti-hepatitis C virus antibody contained in said body sample in the form of an immunological complex.

50. (Previously Presented) A method for the detection of antibodies to hepatitis C virus present in a body fluid sample comprising the steps of:

(a) contacting a body fluid sample of a person to be diagnosed with at least one epitope of any of claims 27 and 45 or a collection of epitopes of any of claims 28-34 and 38-44, and

(b) detecting an immunological complex formed between antibodies in said body fluid sample and said at least one epitope or an epitope of said collection of epitopes, as an indication of the presence of antibodies to hepatitis C virus in said body fluid sample.

51. (Previously Presented) The kit of any one of claims 26-34 and 38-44, wherein said at least one epitope or combination of epitopes are bound to a nylon membrane or microtiter plate.

52. (Previously Presented) The kit of claim 51 wherein said at least one epitope or combination of epitopes are indirectly bound to said nylon membrane or microtiter plate.

53. (Previously Presented) The immunological complex of claim 48 bound to a nylon membrane or microtiter plate.

54. (Previously Presented) A combination of hepatitis C viral (HCV) epitopes comprising

(a) a first HCV epitope comprising at least 5 amino acids from at least one first domain selected from the group consisting of the amino acids 1-20, 7-26, 8-18, 13-32, 37-56, 49-68, 61-80 and 73-92 of the HCV polyprotein; and

(b) a second HCV epitope comprising at least 5 amino acids from at least one second domain selected from the group consisting of amino acids 1688-1707, 1694-1713, 1706-1725, 1712-1731, 1718-1737, 1724-1743, 1730-1749 , 2263-2282, 2275-2294, 2287-2306, 2299-2318, and 2311-2330 of the HCV polyprotein.

55. (Previously Presented) A combination of hepatitis C viral (HCV) epitopes comprising

(a) a first HCV epitope comprising at least 5 amino acids from at least one first domain selected from the group consisting of the amino acids 1-20, 7-26, 8-18, 13-32, 37-56, 49-68, 61-80 and 73-92 of the HCV polyprotein; and

(b) a second HCV epitope comprising at least 5 amino acids from at least one second domain selected from the group consisting of amino acids 1688-1707, 1694-1713, 1706-1725, 1712-1731, 1718-1737, 1724-1743 and 1730-1749 of the HCV polyprotein, and

(c) a third HCV epitope comprising at least 5 amino acids from at least one third domain selected from the group consisting of amino acids 2263-2282, 2275-2294, 2287-2306, 2299-2318, and 2311-2330 of the HCV polyprotein.

56. (Previously Presented) A combination of claim 54 or 55 wherein said first domain is selected from the group consisting of amino acids 7-26, 13-32, and 37-56, 49-68 of the HCV polyprotein.

57. (Previously Presented) A combination of claim 54 wherein said second domain is selected from the group consisting of amino acids 1688-1707, 1694-1713, 1706-1725, 1712-1731, 1718-1737, 1724-1743, 1730-1749, 2287-2306, 2299-2318, and 2311-2330 of the HCV polyprotein

58. (Previously Presented) A combination of claim 55 wherein said second domain is selected from the group consisting of amino acids 1688-1707, 1694-1713, 1706-1725, 1712-1731, 1718-1737, 1724-1743, and 1730-1749, of the HCV polyprotein and said third domain is selected from the group consisting of amino acids 2287-2306, 2299-2318, and 2311-2330 of the HCV polyprotein.

59. (Currently Amended) A combination according to claim 54, 55, ~~56,~~ 57, or 58, wherein said HCV epitopes are individually produced by recombinant expression or chemical synthesis.

60. (Currently Amended) A combination according to claim 54, 55, ~~56,~~ 57, or 58, wherein the combination is in the form of a fusion polypeptide.

61. (Currently Amended) A combination according to claim 54, 55, ~~56,~~ 57, or 58, wherein said epitopes are bound to a solid surface.

62. (Currently Amended) A combination according to claims 54, 55, ~~56,~~ 57, or 58, wherein the combination is packaged into a kit further comprising control reagents for detecting antibodies to hepatitis C virus (HCV) in a mammalian body component suspected of containing said antibodies.

63. (Previously Presented) A method of designing a kit for detection of anti-hepatitis C virus antibodies in a body fluid sample, comprising selecting at least one epitope of claim 26 and combining said at least one epitope with a support suitable for detecting said antibodies bound to said epitope.

64. (new) A combination according to claim 56, wherein said HCV epitopes are individually produced by recombinant expression or chemical synthesis.

65. (new) A combination according to claim 56, wherein the combination is in the form of a fusion polypeptide.

66. (new) A combination according to claim 56, wherein said epitopes are bound to a solid surface.

67. (new) A combination according to claim 56, wherein the combination is packaged into a kit further comprising control reagents for detecting antibodies to hepatitis C virus (HCV) in a mammalian body component suspected of containing said antibodies.

AMENDMENTS TO THE DRAWINGS

The attached four (4) sheets of drawings are further formal copies of Figures 1A-1D which were objected to in the Notice mailed June 18, 2004.